

CURRICULUM VITAE

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name	Antonius Petrus Johannes (Antal) van den Bosch
date of birth	5 May 1969
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nationality	Dutch
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Education

Ph.D.

Universiteit Maastricht (The Netherlands), Department of Computer Science. Thesis *Learning to pronounce written words. A study in inductive language learning*. Defended 11 December 1997; *cum laude*.

M.A.

Taal- en literatuurwetenschap, i.h.b. taal en informatica (, *Arts, with emphasis on computational linguistics*), Faculty of Arts, Tilburg University, The Netherlands. Diploma received 26 May 1992.

Secondary school

Gymnasium β , Gertrudislyceum, Roosendaal, The Netherlands. Graduation 1987.

Positions

Full professor – (*faculteitshoogleraar*), Faculty of Humanities, Utrecht University. From September 2022.

Amazon Scholar – Amazon. From October 2022. Parttime (0.2 fte)

Institute director – Meertens Institute, Royal Netherlands Academy of Arts and Sciences, Amsterdam, the Netherlands. January 2017–September 2022. Fulltime (1.0 fte)

Professor by special appointment – Language and Artificial Intelligence – Faculty of Humanities, Department of Dutch, University of Amsterdam, The Netherlands. From March 2020.

Professor by special appointment – Language and Speech Technology – Faculty of Arts, Department of Communication and Information Sciences, Radboud University, Nijmegen, The Netherlands. January 2017–December 2019.

Research director – Centre for Language Studies, Faculty of Arts, Radboud University, Nijmegen, The Netherlands. September 2015–December 2016.

Full professor – Language and Speech Technology – Faculty of Arts, Department of Communication and Information Sciences, Radboud University, Nijmegen, The Netherlands. September 2011–December 2016. Fulltime (1.0 fte)

Full professor – Memory, Language, and Meaning – School of Humanities, Tilburg centre for Cognition and Communication, and Department of Communication and Information Sciences, Tilburg University, the Netherlands. January 2008–August 2011. Fulltime (1.0 fte)

Associate professor – Faculty of Humanities, Department of Communication and Information Sciences (until January 2007: Faculty of Arts, Dept. of Language and Information Sciences), Tilburg University, the Netherlands. February 2006–December 2007. Fulltime (1.0 fte)

Visiting faculty – WhizBang! Labs–Research, Pittsburgh, PA, USA. September 2001–December 2001. Fulltime (1.0 fte)

Assistant professor – Faculty of Arts (Computational Linguistics and Artificial Intelligence research unit), Tilburg University, The Netherlands. February 2001–January 2006. Fulltime (1.0 fte)

Academie–Onderzoeker – Fellow of the Royal Netherlands Academy of Arts and Sciences (KNAW, Koninklijke Nederlandse Academie van Wetenschappen), Faculty of Arts, Computational Linguistics and Artificial Intelligence research unit, Tilburg University, the Netherlands. July 1999–January 2001. Fulltime (1.0 fte)

Postdoc researcher – financed by NWO, the Netherlands Organisation for Scientific Research, as part of the “Induction of Linguistic Knowledge” (ILK) project at the Faculty of Arts, Computational Linguistics and Artificial Intelligence research unit, Tilburg University, the Netherlands. September 1997–June 1999. Fulltime (1.0 fte)

Assistent in opleiding – Ph.D. student, Department of Computer Science, Faculty of General Sciences, Universiteit Maastricht, The Netherlands. April 1994–August 1997. Fulltime (1.0 fte)

Research assistant – Laboratoire de Psychologie Expérimentale, Université Libre de Bruxelles, Brussels, Belgium. January 1994–March 1994. Fulltime (1.0 fte)

Research assistant – Institute for Language Technology and AI, Tilburg University, the Netherlands. June 1992–December 1993. Halftime (0.5 fte)

Research assistant – Department of Experimental and Theoretical Psychology, Faculty of Social Sciences, Tilburg University, the Netherlands. June 1992–December 1993. Halftime (0.5 fte)

Student assistant – Institute for Language Technology and AI, Tilburg University, the Netherlands. September 1991–May 1992. 0.2 fte

Other affiliations and fellowships

Member – Royal Netherlands Academy of Arts and Sciences, Amsterdam, The Netherlands. Elected 2012.

Member – Maatschappij der Nederlandse Letterkunde, Leiden, the Netherlands. Elected 2017.

Fellow of EurAI, European Coordinating Committee for Artificial Intelligence. Elected 2015.

Research fellow of Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, The Netherlands. 2011–present.

Senior research fellow of SIKS, Dutch Research School for Information and Knowledge Systems. 2009–present.

Guest professor – Faculty of Arts, Department of Linguistics, University of Antwerp, Antwerp, Belgium. January 2005–present.

Publications

Publications are listed in the categories **thesis, books, journal articles, edited volumes, work to appear / preprints, papers in proceedings and book contributions (peer-reviewed), encyclopaedic articles, reports and long abstracts, non-reviewed and popularizing publications, and media productions.**

Thesis

Van den Bosch, A. (1997) *Learning to pronounce written words. A study in inductive language learning*. Ph.D. Thesis, Universiteit Maastricht, the Netherlands. Cadier en Keer: Phidippides. ISBN 9080157724

Books

1. Daelemans, W., and Van den Bosch, A. (2005). *Memory-based language processing*. Cambridge, UK: Cambridge University Press. ISBN 9780521808903
2. Razenberg, K., and Van den Bosch, A. (1997). *Het principe van de quaterniteit als algemeen denkraam*. Best, The Netherlands: Damon. ISBN 9789055730230

Journal articles

1. Bentum, M., Ten Bosch, L., Van den Bosch, L., and Ernestus, M. (2022). Speech register influences listeners' word expectations. *Brain and Language*, Vol. 235, 105197. <https://doi.org/10.1016/j.bandl.2022.105197>
2. Pijpops, D., Speelman, D., and Van den Bosch, A. (2022). Generating hypotheses for alternations at low and intermediate levels of schematicity: The use of Memory-based Learning. *Linguistics Vanguard*. <https://doi.org/10.1515/lingvan-2021-0081>
3. Uddén, J., Hultén, A., Schoffelen, J.-M., Lam, N., Harbusch, K., Van den Bosch, A., Kempen, G., Petersson, K.M., Hagoort, P. (2022). Supramodal sentence processing in the human brain: fMRI evidence for the influence of syntactic complexity in more than 200 participants. *Neurobiology of Language*, 2022. https://doi.org/10.1162/nol_a_00076
4. Yang, J., Van den Bosch, A., and Frank, S. (2022). Unsupervised text segmentation predicts eye fixations during reading. *Frontiers in Artificial Intelligence*, 5. <https://doi.org/10.3389/frai.2022.731615>
5. Smeets, R., De Pourcq, M., and Van den Bosch, A. (2021). Modeling conflict: Representations of social groups in present-day Dutch literature. *Cultural Analytics*, 6: 1-31. <https://doi.org/10.22148/001c.24722>
6. De Troij, R., Grondelaers, S., Speelman, D., and Van den Bosch, A. (2021). Lexicon or grammar? Using memory-based learning to investigate the syntactic relationship between Belgian and Netherlandic Dutch. *Natural Language Engineering*, 1-19. <https://doi.org/10.1017/S1351324921000097>
7. Lopopolo, A., Van den Bosch, A., Petersson, K.M., and Willems, R. (2020). Distinguishing syntactic operations in the brain: Dependency and phrase-structure parsing. *Neurobiology of Language*. https://doi.org/10.1162/nol_a_00029
8. Tsoukala, C., Frank, S., Van den Bosch, A., Valdés Kroff, J., and Broersma, M. (2020). Modeling the auxiliary phrase asymmetry in code-switched Spanish-English. *Bilingualism: Language and Cognition*, 1-10. <https://doi.org/10.1017/S1366728920000449>
9. Tsoukala, C., Broersma, M., Van den Bosch, A., and Frank, S. (2020). Simulating code-switching using a neural network model of bilingual sentence processing. *Computational Brain & Behavior*. <https://doi.org/10.1007/s42113-020-00088-6>
10. Kunneman, F., Van Mulken, M., and Van den Bosch, A. (2020). Anticipation detection in event tweets. *International Journal on Artificial Intelligence Tools*, 29:2. <https://doi.org/10.1142/S0218213020400011>
11. Kunneman, F., Lambooj, M., Wong, A., van den Bosch, A., Mollema, L. (2020). Monitoring stance towards vaccination in Twitter messages. *BMC Medical Informatics and Decision Making*, 20. <https://doi.org/10.1186/s12911-020-1046-y>
12. Grondelaers, S., De Troij, R., Speelman, D., and Van den Bosch, A. (2020). Vissen naar variatie: Digitaal op zoek naar onbekende Noord/Zuid-verschillen in de grammatica van het Nederlands. *Nederlandse Taalkunde*, 25:1, pp. 73-99. <https://doi.org/10.5117/NEDTAA2020.1.004.GRON>
13. Beeksmas, M., Verberne, S., Van den Bosch, A., Das, E., Hendrickx, I., and Groenewoud, S. (2019). Predicting life expectancy with a long short-term memory recurrent neural network using electronic medical records. *BMC Medical Informatics and Decision Making*, 19:36. <https://doi.org/10.1186/s12911-019-0775-2>
14. Croijmans, I., Hendrickx, I., Lefever, E., Majid, A., and Van den Bosch, A. (2019). Uncovering the language of wine experts. *Natural Language Engineering*, 2019, pp. 1-20. <https://doi.org/10.1017/S1351324919000500>

15. Smeets, R., Sanders, E., and Van den Bosch, A. (2019). Character centrality in present-day Dutch literary fiction. *Digital Humanities Benelux Journal*, **1**, pp. 71–90.
16. Van Craenenbroeck, J., Van Koppen, M., and Van den Bosch, A. (2019). A quantitative-theoretical analysis of syntactic microvariation: Word order in Dutch verb clusters. *Language*, **95**:2, pp. 333–370.
<https://doi.org/10.1353/lan.2019.0033>
17. Van der Deijl, L., Smeets, R., and Van den Bosch, A. (2019). The canon of Dutch literature according to Google. *Cultural Analytics*, September 2019.
<https://doi.org/10.22148/16.046>
18. Bentum, M., Ten Bosch, L., Van den Bosch, A., and Ernestus, M. (2019). Do speech registers differ in the predictability of words? *International Journal of Corpus Linguistics*, **24**:1, pp. 101–135
19. Armeni, K., Willems, R., Van den Bosch, A., and Schoffelen, J.-M. (2019). Frequency-specific brain dynamics related to prediction during language comprehension. *Neuroimage*, Online May 15, 2019.
<https://doi.org/10.1016/j.neuroimage.2019.04.083>
20. Verberne, S., Krahmer, E., Wubben, S., and Van den Bosch, A. (2019). Query-based summarization of discussion threads. *Natural Language Engineering*, Online April 16, 2019.
<https://doi.org/10.1017/S1351324919000123>
21. Tellings, A., Oostdijk, N., Monster, I., Grootjen, F., and Van den Bosch, A. (2018). Spelling errors of 24 cohorts of children across primary school 2012–2015: A corpus study. *Computational Linguistics in the Netherlands Journal*, **8**, pp. 83–98.
22. Tellings, A., Oostdijk, N., Monster, I., Grootjen, F., and Van den Bosch, A. (2018). Basiscript: A corpus of contemporary Dutch texts written by primary school children. *International Journal of Corpus Linguistics*, **23**:4, pp.494–508.
<https://doi.org/10.1075/ijcl.17086.tel>
23. Lopopolo, A., Frank, S., Van den Bosch, A., and Willems, R. (2017). Using stochastic language models (SLM) to map lexical, syntactic, and phonological information processing in the brain. *PLOS ONE*, **12**:5, e0177794.
<https://doi.org/10.1371/journal.pone.0177794>
24. Verberne, S., Krahmer, E., Hendrickx, I., Wubben, S., and Van den Bosch, A. (2017). Creating a reference data set for the summarization of discussion forum threads. *Language Resources and Evaluation*.
<https://doi.org/10.1007/s10579-017-9389-4>
25. Hendrickx, I., Onrust, L., Kunneman, F., Hürriyetoglu, A., Stoop, W., and Van den Bosch, A. (2017). Unraveling reported dreams with text analytics. *Digital Humanities Quarterly*, **11**:4.
26. Karsdorp, F., and Van den Bosch, A. (2016). The structure and evolution of story networks. *Royal Society Open Science*, **3**:6.
<https://doi.org/10.1098/rsos.160071>
27. Verberne, S., Boves, L., and Van den Bosch, A. (2016). Information access in the art history domain: Evaluating a federated search engine for Rembrandt research. *Digital Humanities Quarterly*, **10**:4.
28. Ahmadi, S., Cranen, B., Boves, L., Ten Bosch, L., and Van den Bosch, A. (2016). Human-inspired modulation frequency features for noise-robust ASR. *Speech Communication*, **84**, pp. 66–82.
<https://doi.org/10.1016/j.specom.2016.09.003>
29. Hallmann, K., Kunneman, F., Liebrecht, C., Van den Bosch, A., and Van Mulken, M. (2016). Sarcastic soulmates: Intimacy and irony markers in social media messaging. *Linguistic Issues in Language Technology*, **14**:7.
30. Greefhorst, A., and Van den Bosch, A. (2016). Predicting liaison: An example-based approach. *Traitement Automatique des Langues*, **57**:1, pp 13–32.
31. Van Gompel, M., and Van den Bosch, A. (2016) Efficient n-gram, skipgram and flexgram modelling with Colibri Core. *Journal of Open Research Software*, **4**:1, p.e30.
<https://doi.org/10.5334/jors.105>
32. Van den Bosch, A., Bogers, T, and De Kunder, M. (2016). Estimating search engine index size variability: A nine-year longitudinal study. *Scientometrics*, **107**:2, pp. 839–856.
<https://doi.org/10.1007/s11192-016-1863-z>
33. Ittoo, A., Nguyen, L. M., and Van den Bosch, A. (2016). Text analytics in industry: Challenges, desiderata and trends. *Computers in Industry*, **78**, pp. 96–107.
<https://doi.org/10.1016/j.compind.2015.12.001>
34. Kunneman, F., and Van den Bosch, A. (2016). Open-domain extraction of future events from Twitter. *Natural Language Engineering*. **22**:5, pp. 655–686.
<https://doi.org/10.1017/S1351324916000036>
35. Willems, R., Frank, S., Nijhof, A., Hagoort, P., and Van den Bosch, A. (2015). Prediction during natural language comprehension. *Cerebral Cortex*, **26**:6, 2506–2516.
<https://doi.org/10.1093/cercor/bhv075>
36. Karsdorp, F., Van der Meulen, M., Meder, T., and Van den Bosch, A. (2015). MOMFER: A search engine of Thompson’s Motif-Index of folk literature. *Folklore*, **126**:1, pp. 37–52.
<https://doi.org/10.1080/0015587X.2015.1006954>
37. Kunneman, F., Liebrecht, C., Van den Bosch, A., and Van Mulken, M. (2015). Signaling sarcasm: From hyperbole to hashtag. *Information Processing & Management*, **51**:4, pp. 500–509.
<https://doi.org/10.1016/j.ipm.2014.07.006>
38. Stoop, W., and Van den Bosch, A. (2014). Improving word prediction for augmentative communication by using idiolects and sociolects. *Dutch Journal of Applied Linguistics*, **3**:2, pp. 136–153.
<https://doi.org/10.1075/dujal.3.2.03sto>
39. Verberne, S., D’hondt, E., Van den Bosch, A., and Marx, M. (2014). Automatic thematic classification of election manifestos. *Information Processing & Management*, **50**:4, pp. 554–567.
<https://doi.org/10.1016/j.ipm.2014.02.006>
40. Pander Maat, H., Kraf, R., Van den Bosch, A., Dekker, N., Van Gompel, M., Kleijn, S., Sanders, T., and Van der Sloot, K. (2014). T-Scan: a new tool for analyzing Dutch text. *Computational Linguistics in the Netherlands Journal*, **4**, pp. 53–74.
41. Kunneman, F., Hürriyetoglu, A., Oostdijk, N., and Van den Bosch, A. (2014). Timely identification of event start dates from Twitter. *Computational Linguistics in the Netherlands Journal*, **4**, pp. 39–52.
42. Tellings, A., Vermeer, A., Hulsbosch, M., and Van den Bosch, A. (2014). BasiLex: an 11.5 million words corpus of Dutch texts written for children. *Computational Linguistics in the Netherlands Journal*, **4**, pp. 191–208.
43. Tjong Kim Sang, E., and Van den Bosch, A. (2013). Dealing with big data: The case of Twitter. *Computational Linguistics in the Netherlands Journal*, **3**, pp. 121–134.
44. Berendsen, R., De Rijke, M., Balog, K., Bogers, T., and Van den Bosch, A. (2013). On the assessment of expertise profiles. *Journal of the American Society for Information Science and Technology*, **64**:10, pp. 2024–2044.
<https://doi.org/10.1002/asi.22908>

45. Van den Bosch, A. and Daelemans, W. (2013). Implicit schemata and categories in memory-based language processing. *Language and Speech*, **56:3**, pp. 308–326. <https://doi.org/10.1177/0023830913484902>
46. Van den Bosch, A., Morante, R., and Canisius, S. (2012). Joint learning of dependency parsing and semantic role labeling. *Computational Linguistics in the Netherlands Journal*, **2**, pp. 97–117.
47. Van de Camp, M., and Van den Bosch, A. (2012). The social-ist network. *Decision Support Systems*, **53:4**, pp. 761–769. <https://doi.org/10.1016/j.dss.2012.05.031>
48. Van den Bosch, A. (2011). Effects of context and recency in scaled word completion. *Computational Linguistics in the Netherlands Journal*, **1**, pp. 79–94.
49. Haque, R., Naskar, S. K., Van den Bosch, A., and Way, A. (2011). Integrating source-language context into phrase-based statistical machine translation. *Machine Translation*, **25:3**, pp. 239–285. <https://doi.org/10.1007/s10590-011-9100-2>
50. Bogers, T., and Van den Bosch, A. (2011). Fusing recommendations for social bookmarking web sites. *International Journal of Electronic Commerce*, **15:3**, pp. 33–75.
51. Van den Bosch, A., Lendvai, P., Van Erp, M., Hunt, S., Van der Meij, M., and Dekker, R. (2009). Weaving a new fabric of natural history. *Interdisciplinary Science Reviews*, **34:2–3**, pp. 206–223.
52. Van den Bosch, A., Van den Herik, H.J., and Doorenbosch, P. (2009). Digital discoveries in museums, libraries, and archives: Computer science meets cultural heritage. *Interdisciplinary Science Reviews*, **34:2–3**, pp. 129–138.
53. Van den Bosch, A., Van Erp, M., and Sporleder, C. (2009). Making a clean sweep of cultural heritage. *IEEE Intelligent Systems*, **24:2**, pp. 54–63.
54. Van den Bosch, A., and Berck, P. (2009). Memory-based machine translation and language modeling. *The Prague Bulletin of Mathematical Linguistics*, **91**, pp. 17–26.
55. Van den Bosch, A. (2006). Spelling space: A computational testbed for phonological and morphological changes in Dutch spelling. *Written Language and Literacy*, **9:1**, pp. 25–44.
56. Maruster, L., Weijters, A., Van der Aalst, W., and Van den Bosch, A. (2006). A rule-based approach for process discovery: Dealing with noise and imbalance in process logs. *Data Mining and Knowledge Discovery*, **13**, pp. 67–87.
57. Van den Bosch, A. (2005). Scalable classification-based word prediction and confusable correction. *Traitement Automatique des Langues*, **46:2**, pp. 39–63.
58. Hoste, V., Hendrickx, I., Daelemans, W., and Van den Bosch, A. (2002). Parameter optimization for machine learning of word sense disambiguation. *Natural Language Engineering*, **8:4**, pp. 311–325.
59. Maruster, L., Weijters, A., De Vries, G., Van den Bosch, A., and Daelemans, W. (2002). Logistic-based patient grouping for multi-disciplinary treatment. *Artificial Intelligence in Medicine*, **26:1–2**, pp 87–107.
60. Veenstra, J., Van den Bosch, A., Buchholz, S., Daelemans, W., and Zavrel, J. (2000) Memory-based word sense disambiguation. *Computers and the Humanities*, special issue on Senseval, Word Sense Disambiguations, Ed. Adam Kilgarriff and Martha Palmer, **34:1-2**.
61. Van den Bosch, A. (1999). Careful abstraction from instance families in memory-based language learning. *Journal of Experimental and Theoretical Artificial Intelligence*, **11:3**, special issue on Memory-Based Language Processing, W. Daelemans, guest ed., pp. 339–368.
62. Daelemans, W., Van den Bosch, A., and Zavrel, J. (1999). Forgetting exceptions is harmful in language learning. *Machine Learning*, **34**, pp. 11–43.
63. Weijters, A., and Van den Bosch, A. (1999). Interpreting knowledge representations in BP-SOM. *Behaviormetrika*, **26:1**, pp. 107–128.
64. Vroomen, J., Van den Bosch, A., and De Gelder, B. (1998). A connectionist model for bootstrap learning of syllabic structure. *Language and Cognitive Processes*, special issue on Language Acquisition and Connectionism, **13:2/3**, pp. 193–220.
65. Weijters, A., Van den Bosch, A., and Van den Herik, H.J. (1997). Behavioural aspects of combining back-propagation and self-organizing maps. *Connection Science*, **9:3**, pp. 253–252.
66. Daelemans, W., Van den Bosch, A., and Weijters, A. (1997). IGTREE: using trees for compression and classification in lazy learning algorithms. *Artificial Intelligence Review*, special issue on Lazy Learning, **11:1–5**, pp. 407–423.
67. Van den Bosch, A., Content, A., Daelemans, W., and De Gelder, B. (1995). Measuring the complexity of writing systems. *Journal of Quantitative Linguistics*, **1:3**, pp. 178–188.

Edited volumes

1. Zervanou, K., and Van den Bosch, A., editors (2012). *Proceedings of the EACL 2012 workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities*, LaTeCH-2012. Avignon, France.
2. Van den Bosch, A., and Shatkay, H., editors (2012) *Proceedings of the ACL 2012 workshop on Detecting Structure in Scholarly Discourse*, DSSD-2012. Jeju, Korea.
3. Sporleder, C., Van den Bosch, A., and Zervanou, K., editors (2011). *Language Technology for Cultural Heritage: Selected Papers from the LaTeCH Workshop Series*. Berlin: Springer. ISBN 9783642202261
4. Van den Bosch, A., and Bouma, G., editors (2011). *Interactive multi-modal question answering*. Berlin: Springer. ISBN 9783642175244
5. Souidi, A., Van den Bosch, A., and Neumann, G., editors (2007). *Arabic Computational Morphology: Knowledge-based and Empirical Methods*. Berlin: Springer. ISBN 9781402060458
6. Zaenen, A., and Van den Bosch, A., editors (2007). *Proceedings of the 45th Annual Meeting of the Association of Computational Linguistics*, ACL-2007. Prague, Czech Republic. ISBN 9781932432886
7. Sporleder, C., Van den Bosch, A., and Grover, C., editors (2007). *Proceedings of the Workshop on Language Technology for Cultural Heritage*, LaTeCH-2007. Prague, Czech Republic. ISBN 9781932432886
8. Roth, D., and Van den Bosch, A., editors (2002). *Proceedings of the Sixth Conference on Language Learning*, CoNLL-2002. Stroudsburg, PA: ACL.
9. Van den Bosch, A., and Weigand, H., editors (2000). *Proceedings of the Twelfth Belgium-Netherlands Artificial Intelligence Conference*, BNAIC'00. Tilburg: ILK/Infolab.

10. Flach, P., Daelemans, W., and Van den Bosch, A., editors (1997). *Proceedings of the Seventh Belgian-Dutch Conference on Machine Learning*, BENELEARN-97. Tilburg: ILK/Infolab.
11. Daelemans, W., Weijters, A., and Van den Bosch, A., editors (1997). *Workshop notes of ECML/MLnet Familiarization Workshop on Empirical Learning of Natural Language Processing Tasks*, April 1997, Prague, Czech Republic.

Work to appear / preprints

1. Lopopolo, A., Schoffelen, J.-M., Van den Bosch, A., Willems, R. (unpublished). Words in context: Tracking context-processing during language comprehension using computational language models and MEG. *Bioarxiv*. <https://doi.org/10.1101/2020.06.19.161190>

Papers in proceedings and book contributions (peer-reviewed)

1. Waterschoot, C., Van den Hemel, E., and Van den Bosch, A. (2022). Detecting minority arguments for mutual understanding: A moderation tool for the online climate change debate. In *Proceedings of the 29th International Conference on Computational Linguistics*, pp. 6715–6725, Gyeongju, Republic of Korea. International Committee on Computational Linguistics. <https://aclanthology.org/2022.coling-1.583/>
2. Sanders, E., and Van den Bosch, A. (2022). Correlating political party names in tweets, newspapers and election results. In *Proceedings of The LREC 2022 workshop on Natural Language Processing for Political Sciences*, pp. 8–15. <https://aclanthology.org/2022.politicalnlp-1.2>
3. Waterschoot, C., Van den Bosch, A., and Van den Hemel, E. (2021). Calculating argument diversity in online threads. In *Proceedings of the 3rd Conference on Language, Data and Knowledge (LDK 2021)*, pp. 39:1–39:9. Dagstuhl, Germany: Schloss Dagstuhl – Leibniz-Zentrum für Informatik. <https://doi.org/10.4230/OASICS.LDK.2021.39>
4. Yang, J., Frank, S.L., and Van den Bosch, A. (2020). Less is better: A cognitively inspired unsupervised model for language segmentation. In *Proceedings of the Workshop on the Cognitive Aspects of the Lexicon*, pp. 33–45. ACL.
5. Sanders, E., and Van den Bosch, A. (2020). Optimising Twitter-based political election prediction with relevance and sentiment filters. In *Proceedings of the 12th Language Resources and Evaluation Conference*, pp. 6160–6167. Marseille, France: European Language Resources Association (ELRA).
6. Lopopolo, A., Frank, S.L., Van den Bosch, A., and Willems, R. (2019). Dependency parsing with your eyes: Dependency structure predicts eye regressions during reading. In *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics (CMCL-2019)*, pp. 77–85. Minneapolis, Minnesota: ACL.
7. Tsoukala, C., Frank, S.L., Van den Bosch, A., Valdéz Kroff, J., and Broersma, M. (2019). Simulating Spanish-English code-switching: El modelo está generating code switches. In *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics (CMCL-2019)*, pp. 20–29. Minneapolis, Minnesota: ACL.
8. Başar, E., Ekiz, S., and Van den Bosch, A. (2019). A comparative study on generalizability of information extraction models on protest news. In *CLEF 2019 Working Notes: ProtestNews – Extracting Protests from News*. Lugano, Switzerland: CLEF.
9. Bentum, M., Bosch, L.T., Van den Bosch, A., Ernestus, M. (2019) Listening with great expectations: An investigation of word form anticipations in naturalistic speech. In *Proceedings of Interspeech 2019*, pp. 2265–2269. doi:10.21437/Interspeech.2019-2741.
10. Bentum, M., Bosch, L.T., Van den Bosch, A., Ernestus, M. (2019) Quantifying expectation modulation in human speech processing. In *Proceedings of Interspeech 2019*, pp. 2270–2274. doi:10.21437/Interspeech.2019-2685.
11. Stoop, W., Kunneman, F., Van den Bosch, A., and Miller, B. (2019). Detecting harassment in real-time as conversations develop. In *Proceedings of the Third Workshop on Abusive Language Online*, pp. 19–24. Florence, Italy: ACL. doi:10.18653/v1/W19-3503
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199. Van den Bosch, A., and Daelemans, W. (1992). Linguistic pattern matching capabilities of connectionist networks. In: J. van Eijk and W. Meyer Viol (Eds.), *Proceedings of the Computational Linguistics in the Netherlands meeting 1991*. Utrecht: OTS, pp. 40–53 (also appeared in W. Daelemans and D. Powers (Eds.), *Proceedings First SHOE Workshop*, Tilburg: ITK, pp. 183–196.)
200. Daelemans, W. and van den Bosch, A. (1992). Generalization performance of backpropagation learning on a syllabification task. In M.F.J. Drossaers and A. Nijholt (Eds.), *Proceedings of TWLT3: Connectionism and Natural Language Processing*, pp. 27–37. Enschede: University of Twente.
201. Gillis, S., Durieux, G., Daelemans, W. and van den Bosch, A. (1992). Exploring artificial learning algorithms: Learning to stress Dutch simplex words. *Antwerp Papers in Linguistics* 71.

Encyclopaedic articles

1. Van der Beek, L., and Van den Bosch, A. (2015). Translation technology in the Netherlands and Belgium. In S.-W. Chan (Ed.), *The Routledge Encyclopedia of Translation Technology*, Chapter 21, pp. 352–363. New York, NY: Routledge. ISBN 978-0-415-52484-1
2. Van den Bosch, A. (2010). *Hidden markov models*. In C. Sammut and G. I. Webb (Eds.), *Encyclopedia of Machine Learning*. Berlin: Springer Verlag, pp. 493–494. Also contributed cross-referencing entries on *Markov process*, *Viterbi algorithm*, *Baum-Welch algorithm*, and *Expectation-Maximization algorithm*.

Reports, extended abstracts

1. Hürriyetoglu, A., Wagemaker, J., Oostdijk, N., and Van den Bosch, A. (2016). Analysing the role of key term inflections in knowledge discovery on Twitter. In G. Armano, A. Bozzon, M. Cristiani, and A. Giuliani (Eds.), *Proceedings of the 2nd International Workshop on Knowledge Discovery on the Web*, KDWEB-2016, Cagliari, Italy.
2. Koolen, M., Bogers, T., Van den Bosch, A., and Kamps, J. (2015). What makes book search in social media complex? In *Proceedings of the 14th Dutch-Belgian Information Retrieval Workshop*, DIR-2015, Amsterdam, The Netherlands, pp. 21.
3. Reynaert, M., Van Gompel, M., Van der Sloot, K., and Van den Bosch, A. (2015). PICCL: Philosophical Integrator of Computational and Corpus Libraries. In *Proceedings of CLARIN Annual Conference 2015 – Book of Abstracts*, pp. 75–79.
4. Kordoni, V., Cholakov, K., Egg, M., Way, A., Birch, L., Kermanidis, K., Sosoni, V., Tsoumakos, D., Van den Bosch, A., Hendrickx, I., Papadopoulou, M., Georgakopoulou, P., Galama, M., Van Zaanen, M., Buliga, I., Jermol, M., and Orlic, D. (2015). TraMOOC: Translation for Massive Open Online Courses. In *Proceedings of the 18th Annual Conference of the European Association for Machine Translation*.
5. Hürriyetoglu, A., Tsiagkas, M., and Van den Bosch, A. (2013). Real-time storage and processing of all geo-located tweets in MongoDB. In *Proceedings of the Dutch-Belgian Database Day*, Rotterdam, November 13, 2013.
6. Van Gompel, M., Van der Sloot, K., and Van den Bosch, A. (2012). *Ucto: Unicode Tokenizer, Version 0.5.3, Reference Guide*. ILK Technical Report no. ILK-1205.
7. Van den Bosch, A., Sporleder, C., Lendvai, P., Van Erp, M., and Hunt, S. (2009). New perspectives on natural history collections through automated discovery. In *Abstracts of the 24th Annual Meeting of the Society for the preservation of natural history collections* (SPNHC-2009), Leiden, The Netherlands, p. 41.
8. Daelemans, W., Zavrel, J., Van der Sloot, K., and Van den Bosch, A. (2007). *TiMBL: Tilburg Memory-Based Learner, version 6.1, Reference Guide*. ILK Technical Report no. ILK-0707. Earlier versions 1998–2007.
9. Daelemans, W., Zavrel, J., Van der Sloot, K., and Van den Bosch, A. (2007). *MBT: Memory-Based Tagger, version 3.1, Reference Guide*. ILK Technical Report no. ILK-0708. Earlier versions 2002–2007.
10. Van den Bosch, A., Sporleder, C., Van Erp, M., and Hunt, S. (2007). Automatic techniques for generating and correcting cultural heritage collection metadata. In *Proceedings of the 19th Joint International Conference of the Association for Computers and the Humanities, and the Association for Literary and Linguistic Computing*, DH-2007, University of Illinois, Urbana-Champaign, pp. 223–224.
11. Van den Bosch, A. (2004). *Fambl 2.3 Reference Guide*. ILK Technical Report ILK-0403.
12. De Smedt, K., Black, B., Van den Bosch, A., Lavid Lopez, J., McKeivitt, P., Way, A. (2000). European studies on computational linguistics. In K. De Smedt, H. Gardiner, E. Ore, T. Orlandi, H. Short, J. Souillot, and W. Vaughan (Eds.), *Computing in the Humanities Education: A European Perspective*. Bergen, Norway: University of Bergen, pp. 89–154.
13. Weijters, A., Van den Bosch, A., and Van den Herik, H.J. (1996). *Applying Ockham's razor to back-propagation*. Technical Reports in Computer Science CS 96-03, Department of Computer Science, University of Maastricht, the Netherlands.
14. Van den Bosch, A. (1994). A distributed, yet symbolic model of text-to-speech processing. Extended abstract in the *Proceedings of the Cognitive Models of Language Acquisition Workshop*, Tilburg University, pp. 91–93.
15. Daelemans, W., Gillis, S., Van den Bosch, A., and Durieux, G. (1993). Learning linguistic mappings: an instance-based learning approach. In *Conference Abstracts of the ACH-ALLC 1993 International Joint Conference*, Georgetown University, Washington, DC, pp. 38–40.

Non-reviewed and popularizing publications

1. Van den Bosch, A. (2021). Waar is Irma? Vragen op sociale media in coronatijd. In M. van Oostendorp and S. Wolff (Eds.), *Viraal Nederland: Taal en cultuur van de eerste golf*. Sterck & De Vreese, pp. 20–27.
2. Stoop, W., Kunneman, F., Van den Bosch, A., Miller, B. (2021). Catching cyberbullies with neural networks, *The Gradient*, 2021. <https://thegradiant.pub/catching-cyberbullies-with-neural-networks/>
3. Van den Bosch, A. (2015). What's hot in . . . Computational Linguistics? *Benelux A.I. Newsletter*, 1:2, pp. 6–8.
4. Van den Bosch, A. (2012). *Taal in uitvoering*. Inaugural address (In Dutch). Radboud University, November 9, 2012. ISBN 978-90-9027-167-5. Published online at <http://antalvandenbosch.ruhosting.nl/oratie.pdf>
5. Van den Bosch, A. (2012). Valkuil.net: Spellingcorrectie met gevoel voor context. *Tekstblad*, 18:2, pp. 16–18.
6. Bogers, T., and Van den Bosch, A. (2012). Onderzoekers die dit artikel lezen, lezen ook... *Dixit*, 8, p. 42.
7. Van den Bosch, A. (2012). Contextgebaseerde spellingcorrectie met Valkuil.net. *Dixit*, 8, p. 17.

8. Sporleder, C., Van den Bosch, A., and Zervanou, K. (2011). Language technology for cultural heritage, social sciences and humanities: Chances and challenges. In C. Sporleder, A. van den Bosch, and K. Zervanou (Eds.), *Language Technology for Cultural Heritage: Selected Papers from the LaTeCH Workshop Series*. Berlin: Springer, pp. xxi–xxxii.
9. Meijers, J., and Van den Bosch, A. (2011). Voor-onze-nuus-weggekaapt.nl: Nederlandse woorden gegijzeld als domeinnaam. *Onze Taal*, **80:5**, pp. 126–128.
10. Van den Bosch, A. (2011). Ook de burger kan snel schatgraven in WikiLeaks. *Brabants Dagblad*, January 26, 2011.
11. Van den Bosch, A. (2010). Zo had het ook kunnen gaan: Graven in de geschiedenis van de sociale beweging met het HiTiME project. *Dixit*, **7:1**, pp 14–15.
12. Van den Bosch, A. (2010). Van tekst naar tekst. *De Connectie*, **4:4**, pp. 6–9.
13. Van den Bosch, A. (2009). Informatie achter slot en grendel. *ego Magazine*, **8:1**, pp. 16–18.
14. Van den Bosch, A. (2008). *Het volgende woord*. Inaugural address (in Dutch). Tilburg University, October 10, 2008. Published online at <http://ilk.uvt.nl/hetvolgendewoord>
15. Van den Bosch, A. (2008). Digitale verhalen. In H. van Lierop (Ed.), *Jeugdliteratuur en andere media: Cultuureducatie in woord en beeld*. Leidschendam: Biblion Uitgeverij, pp. 16–26.
16. Daelemans, W., and Van den Bosch, A. (2007). Dat gebeurt mei niet: Computationale modellen voor verwarbare homofonen. In D. Sandra, R. Rymenans, P. Cuvelier, and P. van Petegem (Eds.), *Tussen taal, spelling en onderwijs: Essays bij het emeritaat van Frans Daems*. Gent: Academia Press, pp. 199–210.
17. Van den Bosch, A. (2007). Memory-based re-engineering of a knowledge-based dependency parser. In Donkers, J., Mommers, L., Postma, E., and Schmidt, A. (Eds), *Liber amicorum ter gelegenheid van de 60e verjaardag van Prof.dr. H. Jaap van den Herik*. Maastricht: MICC, pp. 168–175.
18. Van den Bosch, A. (2006). Rolaquad. *De Connectie*, **3:3**, pp. 20–23.
19. Van den Bosch, A. (2006). Machine learning and natural language processing in Tilburg. *BNVKI Newsletter*, **23:3**, pp. 52–57.
20. Van den Bosch, A. (2005). Informatie vinden. In H. van Driel (Ed.), *Digitaal Communiceren*. Meppel, the Netherlands: Boom. (in Dutch).
21. Van den Bosch, A. (2002). Text mining for science. In J. Meij (Ed.), *Dealing with the data flood: Mining data, text, and multimedia*. Den Haag, the Netherlands: Stichting Toekomstbeeld der Techniek.
22. Meij, J., and Van den Bosch, A. (2002). Text mining techniques. In J. Meij (Ed.), *Dealing with the data flood: Mining data, text, and multimedia*. Den Haag, the Netherlands: Stichting Toekomstbeeld der Techniek.
23. Van den Bosch, A. (2002). Implementations of memory and analogy for language processing. *NVTI Newsletter, Dutch Foundation for Theoretical Computer Science*, January 2002.
24. Daelemans, W., and Van den Bosch, A. (1992). De voorleesmachine. *Informatica Nieuwsbrief*, **2:9**, pp. 10–15. Alphen aan den Rijn: Samsom. (in Dutch)
25. Van den Bosch, A. (1992). *A hybrid model for text-to-speech conversion*. Unpublished MA thesis, Katholieke Universiteit Brabant.

Media productions

1. Van den Bosch, A. (2007). *k-Nearest Neighbor Classification*. PAL Video, with sound. 3m:21s. Tilburg University.
2. Brienen, S., Graaf, F. de, Lupko, E., Maarsseveen, I. van, Veling, K., Vilsteren, P. van, en Van den Bosch, A. (2000). *Kwintessens*, issue 3. PAL video, with sound. 24m. First broadcast March 13, 2000, Teleac-NOT, Dutch public television.

Other scientific activities

Invited lectures, keynotes

1. *Processing text as socio-economic and cultural data* Language, Data, and Knowledge (LDK-2017), Galway, Ireland, 19-20 June, 2017.
2. *Listening to millions of voices: Text analytics of historical and new media* Hans-Kilian-Vorlesungen, Ruhr Universität Bochum, German, December 14, 2015.
3. *Artificial intelligence and natural language processing* Studium Generale, Erasmus University, Rotterdam, the Netherlands, November 30, 2015.
4. *Prediction and surprise in the brain during narrative comprehension* Cognitive Aspects of Computational Language Learning Workshop, Lisbon, September 18, 2015.
5. *Implicit grammar in memory-based models of syntactic variation* Gradience in Grammar Workshop, Stanford University, CA, USA, January 18, 2014.
6. *Semantics or making sense: Meaning and entailment in text-to-text processing* Intelligent Systems Lab Amsterdam Colloquium, University of Amsterdam, December 17, 2013.
7. *Did it really happen? Discovering events and motifs in historical narratives* Digital Humanities Workshop in memory of Emanuele Pianta, Trento, Italy, December 10, 2013.
8. *Text analytics for detecting events and motifs in historical texts* The 1st International Workshop on Histoinformatics, Kyoto, Japan, November 25, 2013.
9. *Computational modeling: Dividing or equalizing?* Nijmegen Lectures 2013, Max Planck Institute for

- Psycholinguistics, Nijmegen, The Netherlands, January 30, 2013.
10. *Example-based modeling of syntactic alternations.*
Symposium “New Ways of Analysing Syntactic Variation”, Molenhoek, The Netherlands, November 16, 2012.
 11. *Employing source-language context in statistical machine translation.*
Symposium “Exploiting parallel corpora for lexical disambiguation”, Ghent University, September 24, 2012.
 12. *Big linguistic data.*
TLA Nijmegen Lecture Series on E-Humanities, Max Planck Institute for Psycholinguistics, Nijmegen, June 6, 2012.
 13. *Back to basics: Skousen’s natural statistics for language modeling.*
Symposium on occasion of Lou Boves’ farewell lecture, Nijmegen, The Netherlands, April 7, 2011.
 14. *Generating texts from memory.*
Annual School for Information and Knowledge Systems Day, Veldhoven, The Netherlands, November 2, 2010.
 15. *Constraint satisfaction inference for dependency parsing and MT.*
Intelligent Systems Lab Amsterdam Colloquium, University of Amsterdam, Amsterdam, the Netherlands, May 26, 2009.
 16. *Memory-based Language Models for Spelling Correction.*
Twelfth Annual Research Colloquium of the Special Interest Group for Computational Linguistics in the UK and Ireland (CLUKI), Dublin City University, Dublin, Ireland, April 24, 2009.
 17. *Memory-based machine translation.*
CNTS Colloquium, Centre for Dutch Language and Speech, University of Antwerp, Belgium, April 9, 2009.
 18. *Constraint satisfaction inference for dependency parsing and MT.*
NLTC Seminar Series, Dublin City University, Dublin, Ireland, February 17, 2009.
 19. *Implicit Linguistics.*
CLCG Linguistics Colloquium, Groningen, The Netherlands, September 19, 2008.
 20. *Mining natural history.*
SIMIN Spring Symposium, Municipal Museum, The Hague, The Netherlands, June 6, 2008.
 21. *Automatic Part-of-Speech tagging .*
Diachronic Linguistics Meeting, Meertens Institute, Amsterdam, The Netherlands, May 30, 2008.
 22. *Facts are little theories.*
Semantic Web Seminar, University of Utrecht, Utrecht, The Netherlands, March 9, 2008.
 23. *Explicit versus implicit computational linguistics.*
XXIII Congreso de la Sociedad Española para el Procesamiento del Lenguaje Natural (SEPLN-2007), Sevilla, Spain, September 10, 2007.
 24. *Natural language processing and machine learning.*
Free University of Amsterdam AI Group “Natural Language Processing Days”, Leusden, The Netherlands, December 12, 2006.
 25. *A memory-based learning-plus-inference approach to morphological analysis.*
Workshop on Flexible Architectures for Large Vocabulary Recognition (FLaVoR), Leuven, Belgium, November 17, 2006.
 26. *Constraint satisfaction inference for discrete sequence processing in NLP.*
Dublin City University, National Centre for Language Technology Seminar Series, Dublin, Ireland, April 19, 2006.
 27. *Implicit computational linguistics.*
University of Amsterdam, Institute for Logic, Language, and Computation, Computational Linguistics Seminar, March 22, 2006.
 28. *Automatic correction of coreference resolution and chaining.*
Workshop on Anaphora Resolution, Mjølfevell, Norway, September 29, 2005.
 29. *Memory-based understanding of user utterances in a spoken dialogue system: Effects of feature selection and co-learning.*
Textual Case Based Reasoning Workshop at ICCBR-2005, Chicago, IL, August 24, 2005.
 30. *Understanding domain-specific questions and answers.*
Language and Speech Colloquium Series, Nijmegen University, June 1, 2005.
 31. *Learning linguistic sequences.*
Computational Linguistics Seminar Series, University of Bergen, Bergen, Norway, May 2, 2005.
 32. *Learning syntactically valid sequences.*
Workshop on Machine Learning of Information Extraction, Antwerp, Belgium, March 10, 2005.
 33. *Understanding the “More Data” Effect: A Closer Look at Learning Curves.*
University of Edinburgh Division of Informatics Institute for Communicating and Collaborative Systems / Human Communication Research Centre Seminar Series, January 16, 2004.
 34. *Unravelling the intermediate representation myth in natural language processing*
Computing with LLI Seminar series, ILLC, University of Amsterdam, May 31, 2002, on invitation by dr. M. de Rijke.
 35. *Text mining*
Symposium *Dealing with the data flood*, Stichting Toekomstbeeld der Techniek, Rotterdam, April 23, 2002.
 36. *Machine learning: Tools for natural language processing*
Maastricht Machine Learning Day, January 10, 2002.
 37. *Issues in memory-based natural language processing: Memory, representation, and data*
University of Pittsburgh, Learning Research and Development Center (LRDC), November 30, 2001.
 38. *Conjunctive and disjunctive feature construction*
WhizBang! Labs–Research colloquium, September 27, 2001.
 39. *On the usage of word graphs (and more) to detect dialogue problems.*
Nijmegen colloquium on Language and Speech, Katholieke Universiteit Nijmegen, Nijmegen, The Netherlands, April 4, 2001. With Emiel Krahmer and Marc Swerts.

40. *Situating AI, language and logic in a national Dutch research programme on cognition.*
NWO Consultation Day "Fruits of Enlightenment: A special programme for the cognitive sciences", Utrecht, February 9, 2001.
41. *Memory-based language processing.*
IPO Center for User-System Interaction, Eindhoven Technical University, November 10, 2000.
42. *Memory-Based learning and TiMBL.*
Analogical Modeling of Language (AML) Conference, Brigham Young University, Provo, Utah, March 22, 2000. With Walter Daelemans.
43. *Memory-based language processing: some findings and applications.*
Text Learning group meeting, School of Computer Science, Carnegie Mellon University, Pittsburgh PA, March 20, 2000.
44. *Robust language technology for speech technology.*
; IPO Center for User-System Interaction Colloquium series, IPO, Eindhoven Technical University, the Netherlands, March 10, 2000.
45. *Instance-family abstraction in memory-based learning.*
Ninth Dutch-Belgian Conference on Machine Learning (BENELEARN'99), Maastricht, the Netherlands, November 5, 1999.
46. *Learning word pronunciation.*
Parlevink Colloquium Series, Department of Theoretical Informatics, University of Twente, The Netherlands. February 9, 1998.
47. *Experiments in machine learning of morpho-phonology.*
ITK Colloquium Series, Institute for Language Technology and AI, Tilburg University, The Netherlands. December 7, 1995.
48. *A language-independent, data-oriented architecture for grapheme-phoneme conversion.*
Department of Computer Science Colloquium, Universiteit Maastricht, The Netherlands. May 16, 1994.

Teaching experience

Undergraduate level

Radboud University

Intelligent information tools, block course, curriculum Master *Communicatie- en Informatiewetenschappen*, track *Communicatie en beïnvloeding*, Radboud University. Academic years 2011/2012 – 2014/2015.

Nieuwe media, nieuwe genres (New media, new genres), block course, curriculum Master *Communicatie- en Informatiewetenschappen*, track *Nieuwe media, taal en communicatie*, Radboud University. Academic years 2013/2014, 2014/2015. With Wilbert Spooren.

Text Mining, semester course, Research Master *Language and Communication*, Radboud University and Tilburg University. Academic years 2013/2014, 2014/2015.

Example-based Language Modeling, semester course, Research Master *Language and Communication*, Radboud University and Tilburg University. Second semester 2013/2014–2017/2018.

Tilburg University

Introduction Human Aspects of Information Technology, quarter year course, curriculum Bachelor *Communication and Information Technology*, School of Humanities, Tilburg University. First semester 2009/2010. With Eric Postma.

Text mining, block course, curriculum Master *Human Aspects of Information Technology*, Faculty of Humanities, Tilburg University. First semester 2007/2008 (earlier version of course 2004/2005). With Walter Daelemans.

Digitaal erfgoed (Digital heritage), semester course, curriculum Bachelor minor *Computing for the Humanities*, Faculty of Arts, Tilburg University. First semester 2005/2006–2009/2010.

ICT voor studie en werk (ICT for study and work), semester course, curriculum Bachelor ACW and CIW, Faculty of Humanities, Tilburg University. First semester 2006/2007, 2007/2008. With Jan de Vuijst.

Van tekst naar informatie (From text to information), semester course, curriculum Bachelor minor *Computing for the Humanities*, Faculty of Arts, Tilburg University. Second semester 2005/2006. With Sander Canisius.

Language and speech technologies: Advanced, semester course, Research Master *Language and Communication*, Faculties of Arts, Tilburg University and Radboud University. Second semester 2005/2006.

Informatietechnologie (Information technology, before 2005/2006 named *Taal- en informatietechnologie*, Language and information technology), semester block course, curriculum Computational Linguistics and AI / Communication and Digital Media, Faculty of Arts, Tilburg University. Second semester 2001/2002 – 2005/2006. With Emiel Kraemer.

Lerende systemen (Machine learning), semester course, curriculum Computational Linguistics and AI, Faculty of Arts, Tilburg University. Second semester 1999/2000, 2000/2001, 2002/2003.

University of Antwerp

Cognitive Artificial Intelligence, semester course, University of Antwerp, Belgium. First semester 2009/2010.

Language Technology, semester course, University of Antwerp, Belgium. Second semester 2001/2002–2005/2006.

Capita selecta Computational Linguistics: Machine Learning of Language, semester course, University of Antwerp, Belgium. Second semester 2000/2001.

Universiteit Maastricht

Automatisch leren en redeneren (Machine learning and automated reasoning), trimester project, curriculum Knowledge Technology, Faculty of General Sciences, Universiteit Maastricht. With Eric Postma, Ton Weijters, and Peter Braspenning. Second trimester 1995/1996 and 1996/1997.

Kunstmatige intelligentie (Artificial intelligence), trimester course, curriculum Psychology, Faculty of Psychology, Universiteit Maastricht. With Eric Postma. Third trimester 1995/1996.

Graduate and post-graduate levels

Course modules for the Dutch School of Information and Knowledge Systems (SIKS):

Machine learning for language modeling, part of SIKS Advanced Ph.D. course on Computational Intelligence, Utrecht, March 12, 2010.

Issues in empirical machine learning research, part of SIKS Basic Ph.D. course on Research methods and methodology for information and knowledge systems, 2005, 2006, 2009–2019.

Entities in chains, part of SIKS Advanced Ph.D. course on Probabilistic Methods for Entity Resolution and Entity Ranking, Zeist, April 21, 2009.

Implicit linguistics in memory-based language modeling, one-week course as part of the First GLOW Spring School, Brussels, Belgium, April 7–11, 2014.

Exemplar-based versus abstractionist models of word processing, one-week course as part of the ESF NetWords Summer School on Interdisciplinary Approaches to Exploring the Mental Lexicon, with Colin Davis, Dubrovnik, Croatia, July 2–6, 2012.

Inducing linguistic knowledge from statistical machine translation systems, one-week course as part of LOT Summer School (Dutch Graduate School in Linguistics), Leuven, Belgium, June 20–24, 2011.

Memory-based language modeling, one-week advanced course as part of ESSLLI-2010 (22th European Summer School in Logic, Language, and Information), Copenhagen, Denmark, August 16–20, 2010.

Computational linguistics: A machine-learning approach, four-day Ph.D. course, Universitat de Barcelona, Barcelona, Spain, October 9–13, 2006.

Machine learning, half-semester Ph.D. course shared with Eindhoven Technical University, Tilburg and Eindhoven, April–July 2006.

Memory-based language processing, one-week advanced course as part of ESSLLI-2003 (15th European Summer School in Logic, Language, and Information), Vienna, Austria, August 18–22, 2003. With Walter Daelemans.

Memory-based analogical language processing, one-week course as part of LOT Summer School (Dutch National Research School in Linguistics), Tilburg University, June 23–27, 2003.

Machine learning and memory based learning for natural language processing, three-day Ph.D. course as part of a Forskerutdanningskurs Statistik Språkbehandling (Linguistics Workshop on Statistical Language Processing), University of Bergen, Norway, September 30–October 4, 2002.

Inductive language learning, one-week introductory course as part of ESSLLI-X (the Tenth European Summer School in Logic, Language and Information), Saarbrücken, Germany, August 23–28, 1998.

Tutorials

Memory-based models of language learning and processing: A computational account, tutorial at the 13th International Congress for the Study of Child Language, Amsterdam, July 14, 2014. With Walter Daelemans.

Text analytics for data journalism. tutorial at the Annual Meeting of the Association of Investigative Journalists (VVOJ), Ghent, Belgium, November 20, 2010.

Machine learning for text and speech processing, tutorial at the Interspeech 2007 Conference, Antwerp, Belgium, August 27, 2007. With Walter Daelemans.

Machine learning of natural language, tutorial at the 17th European Conference on Machine Learning and the 10th European Conference on Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD06), Berlin, Germany, September 22, 2006. With Walter Daelemans.

Models of memory and analogy for natural language learning and processing, tutorial at the 27th Annual Meeting of the Association for Computational Linguistics (ACL-99), University of Maryland, College Park, Maryland, USA, June 26, 1999.

Grant acquisition

Grants awarded:

(abbreviations: NWO = Netherlands Organisation for Scientific Research; KNAW = Royal Netherlands Academy of Arts and Sciences; SoBU = Cooperation Association of the Brabant Universities; FWO = Flanders Organisation for Scientific Research; EZ = Dutch Ministry for Economic Affairs; OCW = Dutch Ministry for Education, Culture, and Science.) Budgets are in Euros (EUR); in case of co-applied funding with multiple partners, the relevant sub-budget awarded to me is specified.

SoBU project 98-D, *Automatic inductive learning for planning*. 2000-2003. With prof. W. Daelemans, dr. A. Weijters, and prof. H. Wortmann (Eindhoven Technical University). 100,000 EUR. Ph.D. student: L. Maruster (Eindhoven Technical University).

SoBU project 00-C, *Learning to communicate: Machine learning of dialogue strategies*. 2001-2004. With E. Krahmer, J. Terken (Eindhoven Technical University). 105,000 EUR. Ph.D. student: P. Lendvai.

SoBU project 02-10, *Weighted error minimisation in assigning prosodic structure to synthetic speech*. 2002-2004. With J. Terken (Eindhoven Technical University). 90,000 EUR. Ph.D. student: O. van Herwijnen (Eindhoven Technical University).

PROSIT, Prosody from Information in Text. Funded by the joint NWO and FWO (Flanders Organisation for Scientific Research) Vlaams-Nederlands Comité voor Taal en Cultuur. 2001-2004. With W. Daelemans (UIA, Antwerp, Belgium). 620,000 EUR. Researchers: E. Marsi, M. Reynaert, V. Hoste (UIA).

Memory models of language. Funded by NWO *Vernieuwingsimpuls* programme, 2001-2005. 680,000 EUR. Researchers: A. van den Bosch, I. Hendrickx, G.J. Busser.

VindIT: Combining visual and textual information for information retrieval. Funded by NWO ToKeN-2000 Pro-

gramme, 2002-2005. With E.O. Postma (Universiteit Maastricht), L. Vuurpijl and E. Hoenkamp (Nijmegen University). 686,000 EUR. (Tilburg part: 210,000 EUR). Post-doc researcher: M. van Zaanen.

NEXTENS, Nederlandse Extensie voor Tekst naar Spraak. Funded by SST, Stichting Spraaktechnologie (Foundation for Speech Technology), 2002-2003. 40,000 EUR. With T. Rietveld (KUN). Development and research: E. Marsi, A. Russell.

Prosodic annotation for the *Spoken Dutch Corpus*, student assistant team, data generation, and evaluation. Funded by NWO Spoken Dutch Corpus Programme. 2002-2003. 25,000 EUR. With E. Marsi.

ROLAQUAD: Robust Language Understanding in Question-Answer Dialogues. Part of IMIX: *Interactive Multimodal Information Extraction*, an NWO Programme. Funded by NWO, 2004-2008. With W. Daelemans, J. Zavrel (Textkernel B.V.). Researchers: S. Canisius and P. Lendvai. 600,000 EUR.

A-Propos: Pro-active personalization for professional document writing. Funded by the EZ IOP-MMI (Innovative research programmes: Human-machine interaction) programme, 2004-2008. With L. Boves (Radboud University) and a consortium of Dutch language technology companies. 830,000 EUR (Tilburg part: 200,000 EUR). Researcher: T. Bogers.

- MITCH: Mining Information from Texts in the Cultural Heritage.* Part of *CATCH: Continuous Access to the Cultural Heritage*, an NWO Programme. Funded by NWO, 2005-2009. 560,000 EUR. Researchers: C. Sporleder (post-doc), P. Lendvai (post-doc), M. van Erp (Ph.D. student). Scientific programmer: T. Porcelijn, S. Hunt.
- D-Coi: Dutch Corpus Initiative.* Funded by *STEVIN: Spraak-en Taaltechnologische Essentiële voorzieningen in het Nederlands*, an NWO/FWO/EZ/OCW/AWI/IWT Dutch Language Union Programme. With partners from other Dutch and Flemish universities, 2005–2006. 580,000 EUR (Tilburg part: 84,000 EUR). Post-doc researcher: M. Reynaert.
- Implicit Linguistics.* Funded by NWO *VICI* program, 2006-2011. 1,250,000 EUR. Researchers: A. van den Bosch (PI), M. van Zaanen (post-doc researcher, until September 2009), T. Gaustad van Zaanen (post-doc researcher, from October 2009), H. Stehouwer (Ph.D. student). Scientific programmer: P. Berck.
- Linguistic Data Quality Management.* Funded by NWO *HEFBOOM* program, 2006-2008. 81,000 EUR. Post-doctoral researcher: Martin Reynaert.
- SoNaR: STEVIN Nederlandstalig Referentiecorpus, Phase 1.* Funded by *STEVIN: Spraak-en Taaltechnologische Essentiële voorzieningen in het Nederlands*, an NWO/FWO/EZ/OCW/AWI/IWT Dutch Language Union Programme. With partners from other Dutch and Flemish universities, 2008. 100,000 EUR (Tilburg part: 45,000 EUR). Post-doctoral researcher: Tanja Gaustad van Zaanen.
- MEMPHIX: Memory-based Paraphrasing with Implicit and Explicit Semantics*, a Tilburg University Faculty of Humanities Graduate School project. Ph.D. student: Sander Wubben. With profs. Harry Bunt and Emiel Kraemer.
- HITIME: Historical Timeline Mining and Extraction.* Part of *CATCH: Continuous Access to the Cultural Heritage*, an NWO Programme. Funded by NWO, 2009–2013. 614,000 EUR. Researchers: Kalliopi Zervanou (post-doctoral researcher), Matje van de Camp (Ph.D. student), Steve Hunt (scientific programmer).
- DutchSemCor: A one-million-word text corpus for Dutch with sense-tags*, an NWO Humanities Investment Subsidy 'Medium' project, 2009–2012. With prof. P. Vossen (VU Amsterdam), prof. M. de Rijke (University of Amsterdam). 751,000 EUR (Tilburg part: 140,250 EUR). Post-doctoral researcher: Rubén Izquierdo. Scientific programmer: Maarten van Gompel.
- AMICUS: Automated motif discovery in cultural heritage and scientific communication texts*, an NWO Humanities Internationalization networking grant, 2009–2012. With the universities of Borås (Sweden), Pecs (Hungary), the Hungarian Academy of Sciences, and other international partners. 38,000 EUR.
- PoliticalMashup*, an NWO Humanities Investment Subsidy 'Medium' project, 2010–2013. With prof. M. de Rijke, dr. M. Marx (University of Amsterdam), and prof. G. Voerman (University of Groningen). 552,000 EUR (Tilburg part: 98,000 EUR). Post-doctoral researcher: Martin Reynaert.
- TTNWW: TST Tools voor het Nederlands als Webservices in een Workflow*, a Dutch-Flemish CLARIN cooperation (Dutch part funded by NWO). With partners from other Dutch and Flemish universities, 2010–2012. 1,356,000 EUR (Tilburg part: 75,000 EUR). Post-doctoral researcher: Martin Reynaert. Scientific programmer: Maarten van Gompel.
- ADNEXT: Adaptive Information Extraction over Time*, work package 1 of *P1 Infiniti: Information Retrieval for Information Services*, a FES COMMIT project, 2011–2015. 2,845,000 EUR (Nijmegen part: 284,500 EUR). Ph.D. students: Florian Kunneman and Ali Hürriyetoglu.
- Nederlab*, an NWO Humanities Investment Subsidy 'Big' project. With the Meertens Institute and other partners, 2013–2017. 4,000,000 EUR (Nijmegen part: 150,000 EUR). Post-doctoral researcher: Martin Reynaert. Also with Erwin Komen.
- CLARIAH: Common Lab Research Infrastructure for the Arts and Humanities*, funded by the NWO National roadmap for large-scale research facilities program, 2015–2019. 12,000,000 EUR (Nijmegen part: 500,000 EUR). Scientific programmers: Ko van der Sloot. Also with Henk van den Heuvel, Nelleke Oostdijk, Maarten van Gompel.
- DISCOSUMO: Discussion Thread Summarization for Mobile Devices*, funded by NWO Humanities 'Creative Industry' Strategic Research programme, 2015-2018. 423,920 EUR (Nijmegen part: 215.500 EUR). Post-doctoral researcher: Suzan Verberne.
- TraMOOC: Translation for Massive Open Online Courses*, a Horizon 2020 ICT-17 project. With Humboldt University and other partners, 2015–2018. 3.270.710 EUR (Nijmegen part: 319.550 EUR). Post-doctoral researcher: Iris Hendrickx.
- FutureTDM*, a Horizon 2020 GARRI3-2014 project. With the National Library of the Netherlands and other partners, 2015–2018. 1,388,003 EUR (Nijmegen part: 170,870 EUR). Post-doctoral researcher: Maria Eskevich.
- CLARIAH-PLUS: Common Lab Research Infrastructure for the Arts and Humanities*, funded by the NWO National roadmap for large-scale research facilities program, 2019–2023. 13,000,000 EUR (Meertens Institute part: 500,000 EUR).
- Better informing citizens about current debates: Moderating and Summarizing Online Discussions*, funded by NWO Exact Sciences / Social Sciences and Humanities, Creative Industry programme, "NWO Digital Society - the informed citizen", 2020–2024. With Emiel Kraemer (Tilburg University) and nu.nl. 500,000 EUR (Meertens Institute part: 250,000 EUR).
- Culturally-aware Artificial Intelligence*, funded by NWO Artificial Intelligence Responsible Use, 2020–2024. With Marieke van Erp, Laura Hollink (CWI) and Jacco van Ossenbrugge (VU). 500,000 EUR (Meertens Institute part: 250,000 EUR).

Qualifications

Senior University Teaching Qualification, Utrecht University, September 2022

Senior University Research Qualification, Utrecht University, September 2022

Professional organizations

STIL, *Stichting Toepassing Inductieve Leertechnieken* (Foundation for Inductive Learning Applications) (Treasurer 2008–present; Chair 2002–2008; Founding board member since 1997).

SOS, *Stichting Open Spraaktechnologie* (Foundation for Open Speech Technology). Founding board member since 2019.

BNVKI-AIABN: Benelux Association for Artificial Intelligence; Secretary 2001–2006; Chair 2006–2011.

SIGNLL, *Special Interest Group on Natural Language Learning* of the Association for Computational Linguistics (ACL); Chair 2005–2007; Secretary 2003–2005; Information officer 1995–2003.

SIGHUM, *Special Interest Group on Language Technologies for the Socio-economic Sciences and the Humanities* of the Association for Computational Linguistics (ACL); President 2013–2015.

Awards

Best Paper Award, Sixth International Workshop on Computational Models of Narrative, CMN-2015, Atlanta, Georgia, USA. With Folgert Karsdorp, Marten Van der Meulen, Theo Meder.

Best Paper Award, Benelux AI Conference, BNAIC-2014, Nijmegen, The Netherlands, November 2014. With Florian Kunneman.

Best Explanation Award, AI Video Competition, AAAI-2007, Vancouver, CA, August 2007.

Research Award 2002, Faculty of Arts, Tilburg University. With Hans Broekhuis and Ad Backus.

SNS Limburg Award 1998, best Ph.D. esis Universiteit Maastricht 1997–1998.

Advice

Advisor (promotor) of ongoing Ph.D. projects

1. Ryan Brate, KNAW Meertens Institute. With Marieke van Erp and Laura Hollink. From January 1, 2021.
2. Cedric Waterschoot, KNAW Meertens Institute. With Ernst van den Hemel. From September 1, 2020.
3. Xiao Xu, KNAW NIDI, with Anne Gauthier and Gert Stulp. From September 1, 2020.
4. Robbert De Troij, University of Leuven and Radboud University. With Dirk Speelman, Benedikt Szmezcanyi, and Stefan Grondelaers. From January 1, 2018.
5. Jinbiao Yang, Radboud University. With Stefan Frank. From September 1, 2017.
6. Lucas van der Deijl, University of Amsterdam. With Lia van Gemert. From October 1, 2017.
7. Eric Sanders, Radboud University. With Henk van den Heuvel. From January 1, 2015.

Advisor (promotor) or co-advisor (co-promotor) of completed Ph.D.s (reverse chronological order)

1. Martijn Bentum, *Listening with great expectations: A study of predictive natural speech processing*, Radboud University, April 22, 2021. Second promotor, with Mirjam Ernestus and Louis ten Bosch.
2. Chara Tsoukala, *Bilingual sentence production and code-switching*, Radboud University, April 21, 2021. Promotor, with Stefan Frank and Mirjam Boersma.

3. Alessandro Lopopolo, *Properties, Structures, and Operations: Studies on language processing in the brain using computational linguistics and naturalistic stimuli*, Radboud University, January 12, 2021. Promotor, with Roel Willems and Karl-Magnus Petersson.
4. Roel Smeets, *Character constellations: Representations of social groups in present-day Dutch literary fiction*, Radboud University, November 24, 2020. Promotor, with Maarten De Pourcq.
5. Maarten van Gompel, *Context as linguistic bridges*, Radboud University, May 27, 2020. Promotor.
6. Ali Hürriyetoglu, *Extracting actionable knowledge from microtexts*, Radboud University, June 20, 2019. Promotor, with Nelleke Oostdijk.
7. Sara Ahmadi, *Exploiting properties of the human auditory system and compressive sensing methods to increase noise robustness in ASR*, Radboud University, November 2, 2017. Promotor, with Bert Cranen and Louis ten Bosch (co-promoters).
8. Peter Berck, *Memory-based text correction*, Radboud University, April 12, 2017. Promotor, with Eric Postma.
9. Florian Kunneman, *Modelling patterns of time and emotion in Twitter #anticipointment*, Radboud University, March 21, 2017. Promotor, with Margot van Mulken.
10. Dong Nguyen, *Text as social and cultural data: A computational perspective on variation in text*, University of Twente, March 10, 2017. Promotor, with Franciska de Jong and Mariët Theune.
11. Folgert Karsdorp, *Retelling stories: A computational-evolutionary perspective*, Radboud University, December 6, 2016. Promotor, with Franciska de Jong, Theo Meder, and Mariët Theune.
12. Matje van de Camp, *A link to the past: Constructing historical social networks from unstructured data*, Tilburg University, March 2, 2016. Promotor, with Eric Postma.
13. Sander Wubben, *Text-to-text generation by monolingual machine translation*, Tilburg University, June 5, 2013. Promotor, with Emiel Kraemer.
14. Herman Stehouwer, *Statistical language models for alternative sequence selection*, Tilburg University, December 7, 2011. Promotor, with Jaap van den Herik and Menno van Zaanen (co-promotor).
15. Marieke van Erp, *Accessing natural history: Discoveries in data cleaning, structuring, and retrieval*, Tilburg University, June 30, 2010. Promotor, with co-promotor Pirooska Lendvai.
16. Maria Mos, *Complex lexical items*, Tilburg University, May 12, 2010. Promotor, with co-promoters Anne Vermeer and Ad Backus.
17. Toine Bogers, *Recommender systems for social bookmarking*, Tilburg University, December 8, 2009. Promotor.
18. Stephan Raaijmakers, *Multinomial language learning: Investigations into the geometry of language*, Tilburg University, December 1, 2009. Promotor, with Walter Daelemans.
19. Sander Canisius, *Structured prediction for natural language processing: A constraint satisfaction approach*, Tilburg University, February 13, 2009. Promotor, with Walter Daelemans.
20. Martin Reynaert, *Text induced spelling correction*, Tilburg University, December 2, 2005. Co-promotor. Promotor: Walter Daelemans.
21. Iris Hendrickx, *Local classification and global estimation: Explorations of the k-nearest neighbor algorithm*, Tilburg University, November 28, 2005. Co-promotor. Promotor: Walter Daelemans.
22. Pirooska Lendvai, *Extracting information from spoken input*, Tilburg University, December 20, 2004. Co-promotor.
23. Laura Maruster, *A machine learning approach to understand business processes*, Eindhoven Technical University, August 27, 2003. Co-promotor, with Emiel Kraemer (co-promotor), Walter Daelemans (first promotor), and Harry Bunt (second promotor).
24. Sabine Buchholz, *Memory-based grammatical relations*, Tilburg University, The Netherlands, December 13, 2002. Co-promotor. Promoters: Walter Daelemans and Harry Bunt.

Reviewer for journal (alphabetic)

- ACM Computing Surveys
- AI Communications
- Artificial Intelligence
- Annals of Biomedical Engineering
- Computers in Industry
- Computer Speech and Language
- Computational Intelligence
- Computational Linguistics
- Data and Knowledge Engineering
- Frontiers in Psychology
- IEEE Transactions on Knowledge and Data Engineering
- IEEE Transactions on Speech and Audio Processing
- Information Fusion
- Information Systems
- International Computer Games Association Journal
- International Journal of Document Analysis and Recognition
- International Journal of Lexicography
- Iranian Journal of Electrical and Computer Engineering
- Journal for Artificial Intelligence Research
- Journal of Germanic Linguistics
- Journal of Machine Learning Research
- Journal of Management Information Systems
- Journal of Natural Language Engineering
- Koers
- Language Resources and Evaluation
- Literary and Linguistic Computing
- Literator: Tydskrif vir besondere en vergelykende taal- en literatuurstudie
- Machine Learning Journal
- Machine Translation
- PLOS ONE
- Proceedings of the National Academy of Sciences of the United States of America (PNAS)
- Proceedings of the Royal Society A
- Research on Language and Computation
- Science
- Speech Communication
- Tijdschrift voor Taalbeheersing
- Transactions of the Association for Computational Linguistics
- Written Language and Literacy

Programme chair / general chair (reversed chronological)

- ACL-2016, 54th Annual Meeting of the Association for Computational Linguistics. Humboldt University, Berlin, Germany. General chair.
- HistoInformatics-2016, 3rd International Workshop on Computational History. 12–16 July, Krakow, Poland. Programme co-chair with Adam Jatowt, Marten Düring, and Johannes Preiser-Kappeller.
- HistoInformatics-2014, 2nd International Workshop on Computational History. November 10, 2014, Barcelona, Spain. Programme co-chair with Adam Jatowt, Marten Düring, and Gaël Dias.
- BNAIC-2014, 26th Benelux Artificial Intelligence Conference. November 6–7, 2014, Radboud University, Nijmegen, The Netherlands. Programme co-chair with Johan Kwisthout, Tom Heskes, Peter Desain, and Bert Kappen.
- BENELEARN-2013, 22nd Belgian-Dutch Conference on Machine Learning. June 3, 2013, Radboud University, Nijmegen, The Netherlands. Programme co-chair with Tom Heskes and David van Leeuwen.
- LaTeCH-2012, EACL-2012 Sixth Workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities. April 24, 2012, Avignon, France. Programme co-chair with Kalliopi Zervanou.
- ACL-2007, 45th Annual Meeting of the Association for Computational Linguistics. June 25–30, 2007, Prague, Czech Republic. Programme co-chair with Annie Zaenen (PARC).
- LaTeCH, ACL-2007 First Workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities. June 28, 2007, Prague, Czech Republic. Programme co-chair with Caroline Sporleder (Tilburg University, Saarland University) and Claire Grover (University of Edinburgh).
- ESSLLI-2004, European Summer School on Logic, Language, and Information. August 9–20 2004, Nancy, France. Programme chair.
- CoNLL-2002, Sixth Conference on Computational Natural Language Learning. August 31–September 1, 2002, Taipei, Taiwan. Programme co-chair with Dan Roth (UIUC).
- BNAIC-2000, Twelfth Belgian-Dutch Artificial Intelligence Conference. November 1–2 2000, Kaatsheuvel, The Netherlands. Programme co-chair with Hans Weigand (Tilburg University).
- BENELEARN-1997, Seventh Belgian-Dutch Conference on Machine Learning. October 21, 1997, Tilburg University, Tilburg, The Netherlands. Programme co-chair with Peter Flach and Walter Daelemans.

Member of programme committee / reviewer (alphabetic)

- AAAI, Annual Meeting of the Association for the Advancement of Artificial Intelligence (2008). Satellite events:
 - AAAI-2005 Workshop on Spoken Language Understanding for Conversational Systems, Pittsburgh, PA, USA (2005)
- ABC, European Conference of the Association of Business Communication (2011)
- ACL, Annual Meeting of the Association for Computational Linguistics (2003, 2005, 2006, 2008–2012, area chair for ACL-2004, programme chair for ACL-2007). ACL mentor programme 2009, 2010. Satellite events:
 - ACL-2002 Morphological and Phonological Learning Workshop, Philadelphia, PA, USA (2002)
 - ACL-2005 Workshop on Psychocomputational Models of Language Acquisition, Ann Arbor, MI, USA (2005)
 - ACL-2005 Workshop on Software
 - ACL-2007 Workshop on Language Technology for Cultural Heritage, Prague, Czech Republic (2007)
 - ACL-2007 Workshop on Cognitive Aspects of Computational Language Acquisition (2007, 2015, 2016)
 - ACL-2010 Workshop on Domain Adaptation for Natural Language Processing, Uppsala, Sweden (2010)
- AND, Workshop on Analytics for Noisy Unstructured Text Data (2009–2011)
- BENELEARN, Belgian-Dutch Conference on Machine Learning (1996–2001, 2005–2011)
- BNAIC, Belgium-Netherlands Artificial Intelligence Conference (1998–2010)
- CLIN, Computational Linguistics in the Netherlands (1999–2009)
- COGSCI, The Annual Meeting of the Cognitive Science Society (2009)
- COLING, International Conference on Computational Linguistics (2002, 2008)
- CoNLL, Conference on Computational Natural Language Learning (1998–2011)
- DIR, Dutch-Belgian Information Retrieval Workshop (2008–2011)
- EACL, Annual Meeting of the European Chapter of the Association for Computational Linguistics (2001, 2009, 2012, area chair for EACL-2006). Satellite events:
 - EACL-2009 Workshop on Computational Linguistic Aspects of Grammatical Inference, Athens, Greece (2009)
 - EACL 2009 Workshop on Cognitive Aspects of Computational Language Acquisition, Athens, Greece (2009)
- EAMT, Annual Meeting of the European Association for Machine Translation (2010–2012, 2015)
- ECAI, European Conference on Artificial Intelligence (2008, area chair for 2010)
- ECML, European Conference on Machine Learning (1998, 2003; area chair for ECML-PKDD-2008). Satellite event:
 - ECML-97 MLNet Familiarisation Workshop on Empirical Learning of Natural Language, Prague, Czech Republic (1997)
- EMNLP, Empirical Methods in Natural Language Processing Conference (2004–2011, area chair 2010 and 2013)
- ESSLLI, European Summer School on Logic, Language, and Information (programme chair in 2004). Satellite events:
 - ESSLLI-2002 Workshop on Machine Learning Approaches in Computational Linguistics, Trento, Italy (2002)
 - ESSLLI-2007 Workshop on Example-based Models of Language Acquisition and Use, Dublin, Ireland (2007)
 - ESSLLI Student Session (2005–2008)
- ICML, International Conference on Machine Learning (2003, 2007, 2008, area chair for 2005 and 2006)
- IJCAI, International Joint Conference on Artificial Intelligence (2003)
- IJCNLP, International Joint Conference on Natural Language Processing (2011)
- INFWET, Interdisciplinaire Conferentie Informatiewetenschap (2004)
- Interspeech/ICSLP, International Conference on Spoken Language Processing (2006, 2007)
- LaTeCH, Workshop on Language Technology for Cultural Heritage Data (2007–2014)
- LREC, International Conference on Language Resources and Evaluation (2006, 2008, 2010)
- NIPS, Conference on Neural Information Processing Systems (2008, 2009)
- NLDB, International conference on Application of Natural Language Processing to Information Systems (2012)
- *SEM, Joint Conference on Lexical and Computational Semantics (2013, 2015)

Scientific advice

- Netherlands
 - Humanities integrator, Netherlands eScience Centre (2012–2017).
 - Reviewer, NWO programs *Vrije Competitie (Open Competitie)*, *Vernieuwingsimpuls*, *Mozaïek*, *Talent*, *Cognition*
 - Advisor, NWO *Taalportaal* program (2011)
 - Advisor, NWO *CLARIN-NL* program (2010–2011)
 - Advisor, Lorentz Center (2011–2013)
 - Evaluator, Nederlandse Taalunie (Dutch Language Union) (2007)
- International
 - Reviewer, ESF
 - Reviewer, EPSRC *Advanced Fellowship* program, UK
 - Reviewer, BSF (United States–Israel Bi-national Science Foundation) program
 - Reviewer, ICREA (Institució Catalana de Recerca i Estudis Avançats) *Senior Researcher* program, Spain/Catalunya
 - Reviewer, IWT-Vlaanderen, Belgium
 - Reviewer, VLAIO, Flanders, Belgium
 - Reviewer, NRF South Africa

Scientific board memberships

- Chair / Principal investigator, board of National Roadmap for Large-Scale Research Facilities Programme CLARIAH (Common Lab Research Infrastructure for the Arts and Humanities) (from 2014; PI from 2020)
- Chair, board of the Centre for Language and Speech Technology, Faculty of Arts, Radboud University (2012–2018, chair 2015–2018)
- Member, scientific board of NWO Gravity *Language in Interaction* programme (2012–2017)

Advisory board and steering group memberships

- Chair, Nederlandse Taalunie advisory board for INL (Dutch Language Union) (2010–2014)
- Chair, Advisory Board of the Institute for the Dutch Language (INT) (2017–2020)
- Member of the Board of Directors of CLARIN ERIC (from 2022)
- Member, eHumanities.nl network steering committee (from 2016)
- Member, KNAW DANS scientific advisory board (Data Archiving and Networked Services) (2013–2017)
- Member, KNAW Huygens ING scientific advisory board (Huygens Institute for the History of the Netherlands) (2012–2017)

Scientific programme committee memberships

- Netherlands eScience Center *ASDI* (Accelerating Scientific Discovery), chair of the board (2016)
- KNAW Programme *Computational Humanities*, board member (2009–2016)
- NWO Programme *CATCH* (Continuous Access to Cultural Heritage), board member (2004–2010)
- NWO Programme *IMIX* (Interactive Multimodal Information Extraction), board member (2002–2008)